

## **METHOD AND SYSTEM FOR GENERATION AND HOMODYNE DETECTION**

### **ABSTRACT OF THE DISCLOSURE**

The invention solves the problem of generation and homodyne  
5 detection. Its main application refers to generation and reception of microwave  
signals during instantaneous measurement of position and shift of mobile  
elements especially of rotor units of working turbo-machines during true-time  
operation. The method based on the selection of equal value of both electrical  
channels between shunt arm in waveguide T-connection and generation diode in  
10 one collinear arm and in the second collinear arm between the same shunt arm  
and detection diode. The system contains generation diode seating connected  
through waveguide T-connection with detection diode seating.